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(54) Title: COMPOSITION AND VACCINE FOR TREATING LUNG CANCER

(57) Abstract: The present invention relates to a composition comprising at least one mRNA encoding a combination of antigens capable of eliciting an (adaptive) immune response in a mammal, wherein the antigens are selected from the group consisting of 5T4 (Trophoblast glycoprotein, TPBG), Survivin (Baculoviral IAP repeat-containing protein 5; BIRC5), NY- ESO-1 (New York esophageal squamous cell carcinoma 1, CTAG1 B), MAGE-C1 (Melanoma antigen family C1), MAGE-C2 (Melanoma antigen family C2), and MUC1 (Mucin 1). The invention furthermore relates to a vaccine comprising at least one mRNA encoding such a combination of antigens, and to the use of said composition (for the preparation of a vaccine) and/or of the vaccine for eliciting an (adaptive) immune response for the treatment of lung cancer, preferably of non-small cell lung cancer (NSCLC), and diseases or disorders related thereto. Finally, the invention relates to kits, particularly to kits of parts, containing the composition and/or the vaccine.